DEFENSE CONTRACT MANAGEMENT COMMAND

Group Leaders Conference Engineering Overview

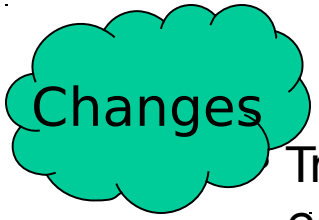
February 29 - March 2, 2000

Mike Ferraro - DCMC Headquarters
Paul Strong - DCMDE SFA Group

Agenda

- Engineering Workshops Update
- Engineering One Book Chapters Status
- Space Broad Area Review Actions

Why Do It?

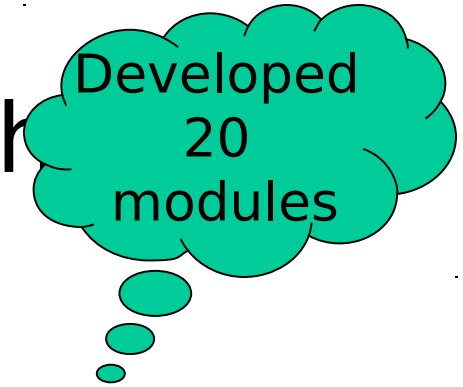


Transition engineering to the current and future acquisition environment

- Transition to performance-based contracting
- Impact of AR & business initiatives
- Widespread use of risk-based management
- Shift to managing suppliers versus supplies

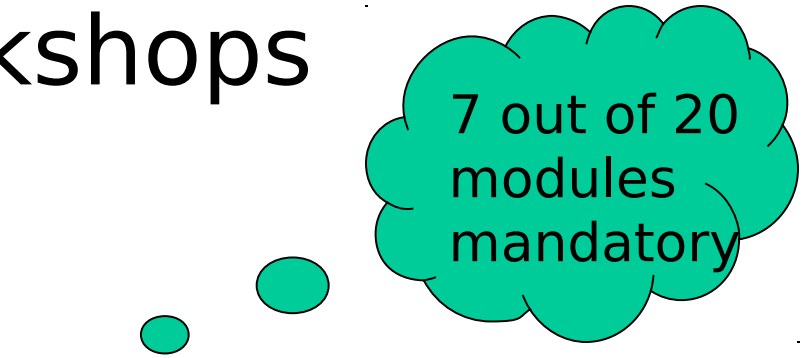
- Change in customer expectations

Pilot Workshops Approach



- Reviewed major reform/business initiatives
- Addressed customer expectations from 1997 and 1998 liaison interviews
- Modified workshop modules based on feedback

FY00 Workshops



- Mandatory modules
- Workshops to start in March 2000

District Staff and CAO Engineering SFAs to complete workshops by September 2000

One Book Chapters Status

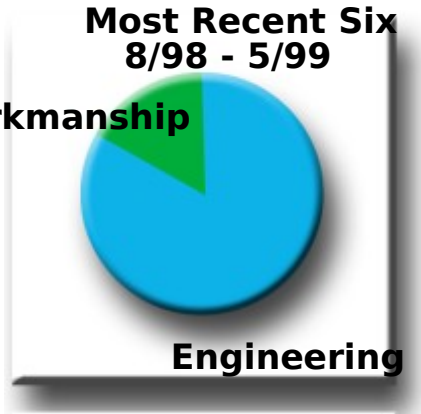
Parts Control SPRD&E	In approval cycle
Configuration Management and Technical Data	Incorporating field comments
Test and Evaluation Integrated Logistics Support	Prepare for field comments

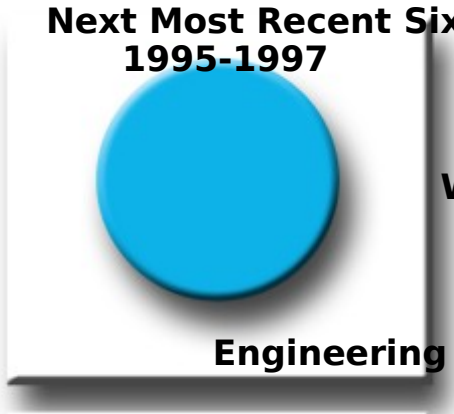
Government & Industry Data Exchange Program

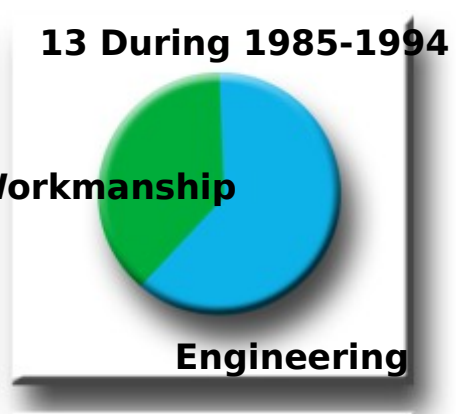
Service Support Resource Tool

Space Launch BAR
Failure and Major Anomaly Causes

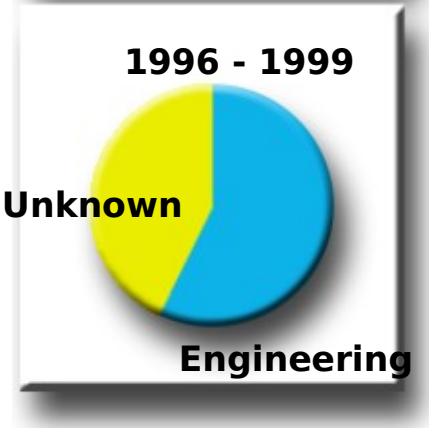
Failures -- 76% Engineering

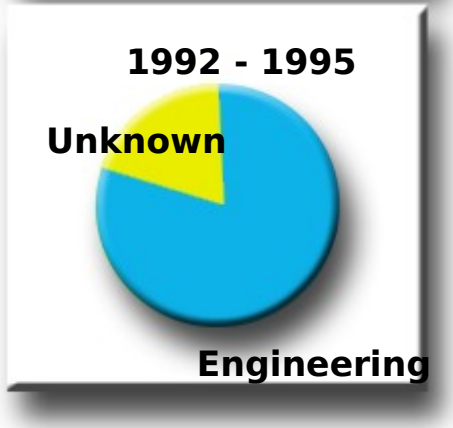


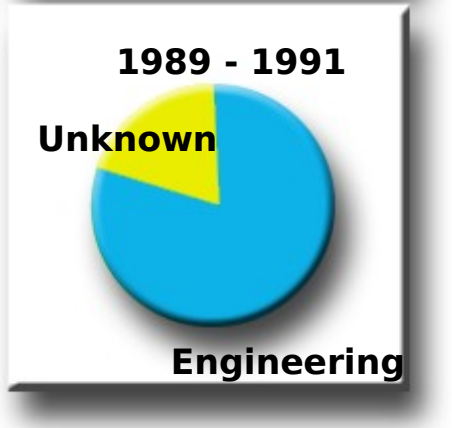




Major Anomalies -- 69% Identifiable as Engineering







- ***Engineering deficiencies prominent in majority of mishaps***
- ***Space launch remains an intensely engineering activity***
- ***Inadequate post flight analysis of anomalies***

Space Launch BAR

Concerns

- Deficient system design and process engineering
- Ambiguous engineering Instructions
- Faulty engineering data analysis
- Inadequate manufacturing discipline

Recommendations

- Increased Engineering and QA presence
- Disciplined systems engineering process
- Continuous examination of engineering, production activities and process validation
- Change control process visibility

Space Launch BAR

only 22% of total engineerin
time is devoted to SPRD&E
which would include the
Systems Engineering functio

DCMC's response to Air Force

- Increase Engineering and C
  - Titan, Atlas, Delta, and EELV
- Analyze cognizant CAOs
  - launch systems major subs
  - space and satellite

DCMC's command wide actions

- Increase systems engineering effort
  - systems analysis using commercial standards

What's Next?

- Review ACAT I Programs
  - Do WBS style gap analysis
  - Add WBS gap analysis to SRM chapter
- Analyze results from space and satellite reviews
  - Identify systems engineering problems
- Determine root causes of poor contractor systems engineering processes
- Identify contractor's evaluation methodologies
- Use system engineering capability models